REMARKS/ARGUMENTS

The claims are 25-28, 31, 32, 36-40, 42, 44, 47 and 48. Claims 45 and 46 have been rewritten as new claims 48 and 47, respectively, to improve their form. Accordingly, claims 45 and 46 have been canceled, and claims 25-28, 31, 32, 36-40 and 44 have been amended to depend on new claim 48. Claim 40 has also been amended to improve its form and to incorporate the subject matter of claim 41. Accordingly, claim 41 has been canceled. Claims 30, 33-35 and 43 have also been canceled, and claim 42 has been amended to improve its form. Support for the claims may be found, *inter alia*, in the disclosure at page 1, lines 2-12; page 5, lines 3-9; page 5, line 15 to page 6, line 9; page 7, lines 3-12; page 10, line 3 to page 11, line 3; in original claims 1, 2, 7, 8, 11, 14 and 15; and in FIG. 3. Reconsideration is expressly requested.

Claims 25-28 and 30-46 were rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. Specifically, the Examiner stated that there was no support for the limitations recited in claims 45-46, that the flat display screen is divided into a plurality of areas via software, with said plurality of areas relating to said at least one transparent region, and said plurality of areas simultaneously dynamically indicating different functional conditions of a connected device dividing the flat display into a plurality of different areas with a commercially available software.

In response, Applicant has rewritten claims 45-46 as new claims 48 and 47, respectively, to improve their form and to more clearly recite the invention. These claims generally correspond with the main claims allowed by the European Patent Office in the corresponding European patent application (copy attached). It is respectfully requested that these new claims be entered in place of claim 45 and 46 as it is believed that they are fully supported in the specification for the following reasons.

As set forth in new claims 47 and 48, Applicant's invention provides a method for representing a surface and a device for use with a commercially available, i.e. standard, flat display, which couples an at least partially-transparent attachment in front of the standard display. As discussed at page 1 of the specification, the device and method create a surface that integrates both switching/controlling elements in a graphical representation and the circuit conditions within any desired process. As discussed on page 5 of the specification, the attachment or add-on component receives a switching/controlling element that, when actuated, triggers a function, and is capable of effecting a display on the display screen. As discussed at page 7 of the specification, commercially available software can be used to generate graphics on the display screen in radial relation to the corresponding switching/controlling elements, and to display the given switching state when the switching/controlling elements are actuated. As discussed at pages 10-11 of the specification, commercially

available operating systems such as, for example Microsoft Windows or Apple DOS, may be used to represent all control functions in the form of high-resolution graphics in color on a commercially available cathode-ray display screen or liquid-crystal display screen.

The written description of the invention under 35 U.S.C. § 112, first paragraph, need only be in such full, clear, concise and exact terms as to enable any person skilled in the art to make and use the invention. It is respectfully submitted that one of ordinary skill in the art upon reading Applicant's disclosure would know how to divide a standard screen or commercially-available flat display using commercially available standard software, such as Microsoft Windows or Apple DOS operating systems, in order to represent control functions, for example, in the form of high resolution graphics in color in at least one area of the flat display and arrange those graphics radially relative to the switching/controlling element integrated in the attachment coupled in front of the commercially-available flat display. Accordingly, it is respectfully submitted that new claims 47 and 48 fully comply with § 112, and Applicant requests that the rejection on this basis be withdrawn.

In addition, in the final Office Action, the Examiner rejected claims 25-26, 28, 30-43, and 45-46 under 35 U.S.C. § 103(a) as being unpatentable over *Jaeger et al. U.S. Patent No. 5,841,428 in*

view of Jaeger U.S. Patent No. 5,977,955. The remaining claims, Claims 27 and 44, were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Jaeger '428, Jaeger '955* and further in view of *Levin et al. U.S. Patent No. 6,154,201.*

Essentially, the Examiner's position was (1) that *Jaeger '428* discloses Applicant's device and method except for a plurality of areas simultaneously dynamically indicating different functional conditions of a connected device, (2) that *Jaeger '955* discloses indicating different functional conditions on areas of the display screen and (3) that it would have been obvious for one of ordinary skill in the art to modify the *Jaeger '428* device to provide visually feedback for the operator. The *Levin et al.* patent is cited as simply showing the use of an LED display or a gas plasma display. The Examiner has also indicated that Applicant's arguments filed in the Amendment on April 17, 2003 are not persuasive because, *inter alia*, the features upon which Applicant relies are not recited in the rejected claims.

This rejection is respectfully traversed.

As set forth in the claims, Applicant's invention provides a method and a device in which commercially-available or standard components are used to construct a useful and simple device in which separate controlling elements placed in front of a normal screen or monitor can be used to control the flat display to

generate graphical areas on the screen which dynamically indicate different functional states of a connected device at the same time. In this way, by means of a simple attachment, a standard flat display may be simply and readily programmed to indicate different functional states or conditions using well-known commercially-available software.

None of the prior art cited by the Examiner discloses or suggests the use of an attachment with separate controlling elements put in front of a normal screen which can be programmed with a commercially-available software, where "commercially" means not in a specific shop or firm and not for a specific apparatus. In other words, commercially-available software means standard commercially-available software such as Microsoft Windows or DOS and not specially designed software of a certain company for a certain apparatus.

The *Jaeger '428* patent fails to show or suggest the specific structure or method steps recited in Applicant's claims and nowhere teaches the benefits arising from a simple attachment using standard software to program a standard flat screen. The transparent cover plate 28 in FIG. 3 of *Jaeger '428* is part of a complicated screen and has a different function from that of the present invention. In *Jaeger*, the switching or control elements are directly integrated into the glass panel of the display, which makes an effort-intensive and complicated production technique

necessary and is therefore expensive. Such a configuration of the interface of a display furthermore requires display-specific software, which brings significant disadvantages with it, as compared with the present invention, which uses commercially available software. The same is true with respect to the *Jaeger '955* patent which, like *Jaeger '428*, is technically complicated and has significant disadvantages for reasons of price, operational reliability, and degrees of familiarity, as compared with a commercially-available software, with which the user will definitely be confronted when selecting a device, and will make a corresponding decision. In a normal case, one using the *Jaeger* devices will have to first learn and practice the device-specific software individual software, while the commercially-available software is already known in most cases and can be reliably operated, and the user can refer back to widespread experience which can significantly facilitate a purchase decision. These undeniable advantages as compared *Jaeger*'s device represent objective evidence of patentability as the use of a completely separated attachment in front of a commercially-available screen or monitor to effect display of the functional conditions is nowhere disclosed or suggested in the *Jaeger* patents.

The *Levin et al.* patent, like the *Jaeger* patents fails to disclose or suggest the generating of a dynamical display of a functional condition of a device using an add-on attachment in front of a standard monitor so that commercially-available software

can generate the functional display. Moreover, *Levin* teaches that the display can include a touch sensitive surface to allow a user to touch displayed images directly on the display, which is a disadvantage as discussed at pages 3-4 of the specification and is to be avoided in Applicant's invention. Thus, it is respectfully submitted that none of the cited art alone, or in combination, teaches the desirability of using commercially-available components to construct a useful and simple device as recited in Applicant's claims. Accordingly, it is respectfully submitted that the independent claims 47 and 48 are patentable over the cited references and the dependent claims are patentable for the same reasons.

In summary, claims 25-28, 31-32, 36-40, 42 and 44 have been amended, claims 47 and 48 have been added and claims 30, 33-35, 41, 43 and 45-46 have been canceled. In view of the foregoing, withdrawal of the final action and allowance of this application are respectfully requested.

Respectfully submitted,
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Frederick J. Dorchak

CLAIMS ALLOWED IN CORRESPONDING EUROPEAN APPLICATION AND ENGLISH TRANSLATION

Aktenzeichen: 99 967 860.0-2206
Unser Zeichen: KD 7034 int.EP

NEUE PATENTANSPRÜCHE

1. Verfahren zur Darstellung einer Oberfläche (1) mit einem ganz oder teilweise durchsichtigen Aufsatz (2), der mindestens ein elektrisches Schalt-/Steuerelement (3, 4, 5) aufweist und über einer flächigen Anzeige (6) eines handelsüblichen Displays angeordnet ist, das softwaremäßig in mehrere Bereiche (7, 8, 9) aufgeteilt ist, wovon mindestens ein Bereich (7) radial zum elektrischen Schalt-/Steuerelement (3, 4, 5) angeordnet wird, d a d u r c h g e k e n n z e i c h n e t, dass

- die sichtbaren Bereiche (7, 8, 9) der flächigen Anzeige (6) mit einer handelsüblichen Software erstellt werden, wobei

- die einzelnen Bereiche (7, 8, 9) gleichzeitig verschiedene Funktionszustände einer angeschlossenen Apparatur dynamisch anzeigen.

2. Anordnung eines ganz oder teilweise durchsichtigen Aufsatzes (2), der mindestens ein elektrisches Schalt-/Steuerelement (3, 4, 5) aufweist und über einer flächigen Anzeige (6) eines handelsüblichen Displays, das softwaremäßig in mehrere Bereiche (7, 8, 9) aufgeteilt ist, angeordnet ist, wovon mindestens ein Bereich (7)

radial zum elektrischen Schalt-/Steuerelement (3, 4, 5, angeordnet ist, d a d u r c h g e k e n n z e i c h n e t, dass

- die sichtbaren Bereiche (7, 8, 9) der flächigen Anzeige (6) mit einer handelsüblichen Software programmiert werden; wobei

- die einzelnen Bereiche (7, 8, 9) gleichzeitig verschiedene Funktionszustände einer angeschlossenen Apparatur dynamisch anzeigen.

3. Anordnung nach Anspruch 2, d a d u r c h g e k e n n z e i c h n e t, dass die flächige Anzeige (6) eine elektronische Kathodenstrahlröhre ist.

4. Anordnung nach Anspruch 2, d a d u r c h g e k e n n z e i c h n e t, dass die flächige Anzeige (6) eine LCD-Anzeige ist.

5. Anordnung nach Anspruch 2, d a d u r c h g e k e n n z e i c h n e t, dass der flächige Anzeige (6) eine LED-Anzeige ist.

6. Anordnung nach Anspruch 2 , d a d u r c h g e k e n n z e i c h n e t, dass die flächige Anzeige (6) eine Plasmaröhre ist.

7. Anordnung nach Anspruch 2, d a d u r c h g e k e n n z e i c h n e t, dass der Aufsatz (2) eine flächige Abdeckung darstellt.

8. Anordnung nach Anspruch 2 , d a d u r c h g e k e n n z e i c h n e t, dass das mindestens eine Schalt-/Steuerelement (3,4,5) an/auf/in dem Aufsatz (2) eine Mikrotaster, Drehgeber, oder linearer Weggeber ist.

9. Anordnung nach Anspruch 2, d a d u r c h g e k e n n z e i c h n e t, dass die Schalt-/Steuerelemente (3, 4, 5) mittels einer gedruckten Schaltung elektrisch mit weiteren elektrischen/elektronischen Bauteilen (Mikroprozessoren) verbunden sind.

10. Anordnung nach Anspruch 2 , d a d u r c h g e k e n n z e i c h n e t, dass die Graphik (11) Schaltzustände anzeigt.

11. Anordnung nach Anspruch 2 , d a d u r c h g e k e n n z e i c h n e t, dass die Graphik (11) ein Fernsehbild anzeigt.

12. Anordnung nach Anspruch 2 , d a d u r c h g e k e n n z e i c h n e t, dass der Aufsatz (2) aus Kunststoff oder Metall ist.

13. Anordnung nach Anspruch 2 , d a d u r c h g e k e n n z e i c h n e t, dass der Aufsatz (2) Durchbrüche (8, 9, 10) aufweist, die als Fenster dienen.

14. Anordnung nach Anspruch 2 , d a d u r c h g e k e n n z e i c h n e t, dass die Flächen zwischen den Durchbrüchen (8, 9, 10) Schalt-/Steuerelemente (3, 4, 5) aufnehmen.

New Claims

1. Method for representing a surface (1) having a completely or partially transparent superstructure (2), which has at least one electrical switching/control element (3, 4, 5) and is arranged above a flat display (6) of a commercially available display, which is divided by software into several areas (7, 8, 9), of which at least one area (7) is arranged radially relative to the electrical switching/control element (3, 4, 5), characterized in that

   - the visible areas (7, 8, 9) of the flat display (6) are created using a commercially available software, whereby

   - the individual areas (7, 8, 9) dynamically display different functional states of a connected apparatus, at the same time.

2. Arrangement of a completely or partially transparent superstructure (2), which has at least one electrical switching/control element (3, 4, 5) and is arranged above a flat display (6) of a commercially available display, which is divided by software into several areas (7, 8, 9), of which at least one area (7) is arranged radially relative to the electrical switching/control element (3, 4, 5), characterized in that

- the visible areas (7, 8, 9) of the flat display (6) are created using a commercially available software, whereby

- the individual areas (7, 8, 9) dynamically display different functional states of a connected apparatus, at the same time.

3. Arrangement according to Claim 2, characterized in that the flat display (6) is an electronic cathode ray tube.

4. Arrangement according to Claim 2, characterized in that the flat display (6) is an LCD display.

5. Arrangement according to Claim 2, characterized in that the flat display (6) is an LED display.

6. Arrangement according to Claim 2, characterized in that the flat display (6) is a plasma tube.

7. Arrangement according to Claim 2, characterized in that the superstructure (2) represents a flat cover.

8. Arrangement according to Claim 2, characterized in that at least one switching/control element (3, 4, 5) on/in the superstructure (2) is a microsensor, a rotation transducer,

or a linear path transducer.

9. Arrangement according to Claim 2, characterized in that the switching/control elements (3, 4, 5) are electrically connected with other electrical/electronic components (microprocessors) by means of a printed circuit.

10. Arrangement according to Claim 2, characterized in that the graphics (11) display switching states.

11. Arrangement according to Claim 2, characterized in that the graphics (11) display a television image.

12. Arrangement according to Claim 2, characterized in that the superstructure (2) is made of plastic or metal.

13. Arrangement according to Claim 2, characterized in that the superstructure (2) has openings (8, 9, 10) that serve as windows.

14. Arrangement according to Claim 2, characterized in that the flat areas between the openings (8, 9, 10) hold switching/control elements (3, 4, 5).